5

10

15

 A device for determining the position of a vehicle on a roadway by using radio waves which are emitted from the device and reflected by the vehicle and received by at least two array antennas (1, 2) arranged across the roadway, wherein the array antennas (1, 2) comprise a number of antenna elements (5-14), one of the antenna elements in the respective array antenna constituting the phase center (5, 10) of the array antennas, and wherein the antenna elements (5-14) of the array antennas are connected to one another such that the distance (d) between the phase centers (5, 10) of the array antennas (1, 2) included is smaller than half the width of an individual array antenna (1, 2).

(Figure 3)